Thoughts on Temperature Criteria Options for Idaho

Keep Idaho's Current Criteria/Uses

Pros:

+ Least cost in the short-term
+ Benefits of alternatives unclear, or hotly debated, thus no good reason to voluntarily change

Cons:

- Protectiveness of fish is questioned by EPA and the Services (NOAA Fisheries and Fish and Wildlife Service), criteria should be lowered
- Likely that EPA will eventually promulgate its regional temperature criteria for Idaho (or a third party lawsuit may force EPA to do so)
- Limited range of criteria/uses does not reflect Idaho's geographic (thus thermal) diversity
- Even wilderness/unimpaired waters in Idaho do not meet these criteria, criteria should be raised
- Attainability of criteria questioned, i.e. natural potential for cooler water still exceeds criteria in many cases, or involves costs (removing levees or dams) many find unacceptable
- Based on out-dated metrics and science

Neutral:

→ Allows for natural conditions to exceed criteria (means to recognize un-attainability)
→ Some recognition of natural variability (i.e. hot weather exemption, Director's waiver)

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Adopt & Implement EPA Region 10 Guidance

Pros:

+ More protective of fish in some waters (those waters where potential for cooling could result in water temperatures less than Idaho's current criteria)
+ Salmonid spawning criterion is optional and higher than Idaho's current criteria, this could lessen future "false positive" 303(d) listings for temperature
+ Would alleviate political pressure from EPA and perhaps Services to update temperature criteria
+ Simplified single metric approach (i.e. one criterion per use, rather than current pair) is easier to implement
+ Based on more recent science

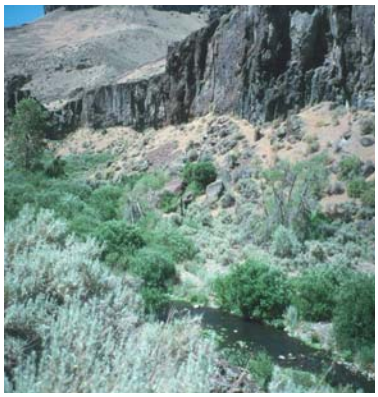
Cons:

- Except for salmonid spawning use, the recommended criteria ("upper end of optimum")are lower than current criteria, thus less attainable
- Would require replacing Idaho's present system of aquatic life uses, a large undertaking
- More data than presently exists on fish use by life-stage is needed to best figure out application to Idaho waters, especially for salmonid spawning and "core" rearing
- Might require more extensive use of natural background to reconcile attainability with potential for lower water temperature, and this would be very costly

Neutral:

→ Allows for natural conditions to exceed criteria (means to recognize and deal with un-attainability)

→ Recognizes natural variability (role of refugia, warmest one year in ten can exceed criteria)



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Develop Site-Specific Criteria

Pros:

+ Criteria could be tailored to Idaho, or even each waterbody/species combination
+ Potentially employs the latest science
+ Could recognize local thermal potential, natural variability (e.g. Use Attainability Analysis / natural conditions approach)

Cons:

- Likely difficult to convince EPA that site-specific criteria are better / as protective as those in their 2003 regional guidance
- Very costly, even if done statewide; costs multiply if done repeatedly for smaller areas or regions of Idaho
- Will have to go through EPA approval and ESA consultation for each application, and this could take more than a decade
- No guarantee end result would be any different than regional guidance

Neutral:

→ Resulting criteria should offer the same level of protection as the more general criteria it replaces

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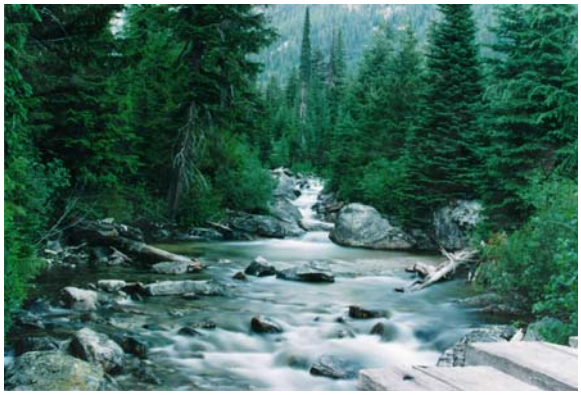
Other – Potential Natural Vegetation (PNV)



Pros:

+ Approach works to reduce water temperature in vast majority of cases
+ Helps habitat and other aspects of stream health as well
+ Seems to be more understandable, and more accepted, than modeling heat loads to meet criteria numbers

Cons:

- Does not work if factors other than shade reduction are important cause of temperature increases
- May result in significant opposition from interest groups that see DEQ as exceeding its authority by branching out from water quality management into land management

Neutral:

→ Basically what we are doing now and would continue to be able to do in most cases, irrespective of the numeric criteria